This listing of claims will replace all prior versions of the claims in this application:

Listing of Claims:

Claims 1 – 4 (Canceled)

Claim 5. (New) A method of generating a dental implant comprising, applying tooth germ cells onto a biodegradable polymer scaffold and allowing the tooth germ cells to develop into a tooth for implantation.

Claim 6. (New) The method of generating a dental implant of claim 5, further comprising forming a tooth mold, wherein the biodegradable polymer scaffold is formed in the tooth mold.

Claim 7. (New) The method of generating a dental implant of claim 5, wherein the biodegradable polymer scaffold is in the shape of a tooth.

Claim 8. (New) The method of generating a dental implant of claim 5, wherein the biodegradable polymer scaffold is in the shape of a human tooth.

Claim 9. (New) The method of generating a dental implant of claim 5, wherein the tooth germ cells comprise cells from an enamel organ and a pulp organ.

Claim 10. (New) The method of generating a dental implant of claim 9, wherein the tooth germ cells are mammalian.

Claim 11. (New) The method of generating a dental implant of claim 9, wherein the tooth germ cells are porcine.

Claim 12. (New) The method of generating a dental implant of claim 5, wherein the tooth germ cells comprise cells dissociated from an enamel organ, a pulp organ, and from tissue cultured cells derived from tooth tissues.

Claim 13. (New) The method of generating a dental implant of claim 5, wherein the scaffold is implanted into an omentum of a host animal.

Claim 14. (New) The method of generating a dental implant of claim 13, wherein the scaffold is implanted into the omentum of a rat.

Claim 15. (New) The method of generating a dental implant of claim 5, wherein the tooth germ cells are applied to the biodegradable polymer scaffold with between about 20 to 50 million cells per square inch of scaffold.

Claim 16. (New) The method of generating a dental implant of claim 5, wherein the biodegradable polymer scaffold is selected from the group consisting of poly(lactide), poly(glycolide), and poly(L-lactide-co-glycolide).

Claim 17. (New) The method of generating a dental implant of claim 5, wherein the tooth germ cells are allowed to attach to the scaffold for at least one hour prior to implanting.

Claim 18. (New) The method of generating a dental implant of claim 5, wherein the biodegradable polymer scaffold is coated in collagen prior to applying.

Claim 19. (New) A method of generating a dental implant comprising forming a biodegradable polymer scaffold, applying tooth germ cells onto the biodegradable polymer scaffold, and implanting the scaffold into a host animal.

Claim 20. (New) The method of generating a dental implant of claim 19, further comprising preparing a tooth mold wherein the biodegradable polymer scaffold is formed in the tooth mold.

Claim 21. (New) The method of generating a dental implant of claim 19, wherein the biodegradable polymer scaffold is in the shape of a tooth.

Claim 22. (New) The method of generating a dental implant of claim 19, wherein the biodegradable polymer scaffold is in the shape of a human tooth.

Claim 23. (New) The method of generating a dental implant of claim 19, wherein the tooth germ cells comprise cells dissociated from an enamel organ and a pulp organ.

Claim 24. (New) The method of generating a dental implant of claim 23, wherein the tooth germ cells are mammalian.

Claim 25. (New) The method of generating a dental implant of claim 23, wherein the tooth germ cells are porcine.

Claim 26. (New) The method of generating a dental implant of claim 19, wherein the tooth germ cells comprise cells dissociated from an enamel organ, a pulp organ, and from tissue cultured cells derived from tooth tissues.

Claim 27. (New) The method of generating a dental implant of claim 19, wherein the scaffold is implanted into an omentum of a host animal.

Claim 28. (New) The method of generating a dental implant of claim 27, wherein the scaffold is implanted into the omentum of a rat.

Claim 29. (New) The method of generating a dental implant of claim 19, wherein the tooth germ cells are applied to the biodegradable polymer scaffold with between about 20 to 50 million cells per square inch of scaffold.

Claim 30. (New) The method of generating a dental implant of claim 19, wherein the biodegradable polymer scaffold is selected from the group consisting of poly(lactide), poly(glycolide), and poly(L-lactide-co-glycolide).

Claim 31. (New) The method of generating a dental implant of claim 19, wherein the tooth germ cells are allowed to attach to the scaffold for at least one hour prior to implanting.

Claim 32. (New) The method of generating a dental implant of claim 19, wherein the biodegradable polymer scaffold is coated in collagen prior to applying.

Claim 33. (New) A method of generating a dental implant comprising preparing a tooth mold in the shape of a human tooth, forming a biodegradable polymer scaffold in the tooth mold, applying tooth germ cells onto the biodegradable polymer scaffold, and implanting the scaffold into an omentum of a host animal.

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